



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/912,099	07/24/2001	Zuoxing Yu	CSA 2 0145	5530

7590

01/30/2003

FAY, SHARPE, FAGAN, MINNICH & McKEE, LLP
Seventh Floor
1100 Superior Avenue
Cleveland, OH 44114-2518

EXAMINER

AHMED, SHEEBA

ART UNIT

PAPER NUMBER

1773

DATE MAILED: 01/30/2003

8

Please find below and/or attached an Office communication concerning this application or proceeding.

498

Office Action Summary

Application No.

09/912,099

Applicant(s)

YU ET AL.

Examiner

Sheeba Ahmed

Art Unit

1773

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 12/2/02.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 21-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 21-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. Claims 1-20 have been canceled in the above-identified application. **Claims 21-29 are now pending.**

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 102

2. Claims 21 and 24-29 are rejected under 35 U.S.C. 102(e) as being anticipated by Honda et al. (US 6,110,546).

Honda et al. disclose an automobile weather strip (*corresponding to the wear resistant composite of claim 21*) that includes a weather strip body (*corresponding to the main body member of claim 21*) formed from a rubber composition and a decorative layer (*corresponding to the abrasion resistant decorative layer of claim 21*) comprising at least one thermoplastic elastomer directly adhered to the weather strip body (Column 1, lines 6-13). The rubber composition that forms the weather strip body comprises a rubber polymer such as an ethylene-alpha-olefin-non-conjugated diene copolymer (EODM) (*thus meeting the limitation that the main body member comprises a crosslinked elastomer rubber*) wherein the alpha-olefin maybe propylene (*in which case the EODM is EPDM*) (Column 3, lines 2-42). The decorative layer comprises a thermoplastic elastomer such as an olefin thermoplastic elastomer

Art Unit: 1773

(TPO) or a styrene thermoplastic elastomer (TPS). The TPO comprises an ethylene-alpha-olefin copolymer rubber (***thus meeting the limitation that the decorative layer comprises an ethylene-alpha-olefin copolymer***) wherein the alpha-olefin may be octene (Column 3, lines 60-68 and Column 4, lines 11-32). The ethylene-alpha-olefin copolymer rubber can have a partially-crosslinked structure wherein the crosslinking is achieved via the use of crosslinking agents (Column 4, lines 63-68 and Column 5, lines 1-5). The styrene thermoplastic elastomer used in the decorative layer comprises an olefin resin and a vinyl aromatic compound such as styrene (Column 5, lines 6-20). The Examples indicate that the decorative layer may have a thickness of 0.3mm (***thus meeting the limitations of claims 27 and 28***). With regards to the process limitations recited in claims 26 and 29, the Examiner would like to remind the Applicants that the determination of patentability for product claims containing process limitations is based on the product itself and not on the method of production. If the product is the same or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. *In re Thorpe*, 227 USPQ 964, 966 (Fed. Cir. 1985) and also see MPEP 2113. In this case, the product (i.e., the composite material) is the same despite the process limitations of extruding the two layers together. All limitations of the claimed invention are disclosed in the above reference.

Claim Rejections - 35 USC § 103

3. Claims 22 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Honda et al. (US 6,110,546) in view of Scott et al. (US 3,6546,155).

Honda et al., as discussed above, state that the decorative layer may comprise a ethylene-octene copolymer which has been at least partially crosslinked but do not specifically state that ethylene-octene copolymer rubber used in the decorative layer is crosslinked with a silane compound. However, Scott et al. the crosslinking of olefin copolymer using a silane compound such that the crosslinking may be carried out in two stages and yields a product that has extremely high resistance to stress cracking and could be employed in extruded articles (Column 1, lines 54-65 and Column 5, lines 14-26). Accordingly, it would have been obvious to one having ordinary skill in the art to crosslink the ethylene-octene copolymer disclosed by Honda et al. with a silane compound given that Scott et al. specifically teach that doing so yields a product that has extremely high resistance to stress cracking and could be employed in extruded articles.

Response to Arguments

4. Applicant's arguments filed on December 2, 2002 (Paper No. 7) have been fully considered but they are not persuasive. Applicants traverse the rejection of claims 21 and 24-29 under 35 U.S.C. 102(e) as being anticipated by Honda et al. (US 6,110,546) and the rejection of claims 22 and 23 under 35 U.S.C. 103(a) as being unpatentable over Honda et al. (US 6,110,546) in view of Scott et al. (US 3,654,155) and submit that the decorative layer of Honda comprises a two phase thermoplastic elastomer blend of an olefinic resin and an elastomer rubber whereas the present invention includes a decorative layer comprising a crosslinkable thermoplastic which is a single phase

Art Unit: 1773

thermoplastic copolymer. Applicants assert that Honda fails to disclose a crosslinkable decorative layer.

First, the Examiner would like to point out that the claimed invention is simply directed to a partially crosslinked thermoplastic decorative layer wherein the thermoplastic is selected from a crosslinkable ethylene- α -olefin copolymer or a crosslinkable ethylene-styrene interpolymer and not a single-phase thermoplastic copolymer as asserted by the Applicants. Second, Honda et al. specifically disclose a decorative layer that comprises a thermoplastic elastomer such as an olefin thermoplastic elastomer (TPO) or a styrene thermoplastic elastomer (TPS). The TPO comprises an ethylene- α -olefin copolymer rubber wherein the ethylene- α -olefin copolymer rubber can have a partially-crosslinked structure and hence the limitations of the claimed invention have been met.

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

Art Unit: 1773

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sheeba Ahmed whose telephone number is (703)305-0594. The examiner can normally be reached on Mon-Fri 8am-4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Thibodeau can be reached on (703)308-2367. The fax phone numbers for the organization where this application or proceeding is assigned are (703)305-5408 for regular communications and (703)305-3599 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)306-5665.



Sheeba Ahmed
January 27, 2003



Paul Thibodeau
Supervisory Patent Examiner
Technology Center 1700